# Urinary-Pro – Acute UTI Support

# **About Urinary-Pro**

- Urinary-Pro provides a unique combination of four plant extracts that support healthy urinary function.
- Bearberry, also known as uva-ursi, has a long history of use in traditional herbal medicine for its antimicrobial and diuretic effects.<sup>1</sup> Bearberry contains arbutin and its metabolite hydroquinone, compounds shown to target the bacterial cell wall and membrane, as well as bacterial protein synthesis.<sup>2</sup>
- In a clinical trial, women with recurrent bladder infections taking bearberry experienced no subsequent infections over a one-year period, while nearly one-fourth of the women taking a placebo had at least one infection.<sup>3</sup>
- Urinary-Pro also contains berberine, which has a long history of use in herbal systems of medicine, primarily for its antimicrobial effects. It has demonstrated antibacterial action against many different organisms, including *E. coli*, the most common cause of urinary tract infections.<sup>4,5</sup>
- In addition to its traditional use as an antimicrobial agent, berberine has also recently been shown to have anti-inflammatory effects.<sup>6,7</sup>
- Juniper, provided in a concentrated extract, inhibits bacterial growth and adhesion in vitro, including *E. coli*.<sup>8–10</sup>
- *Echinacea purpurea*, also in a concentrated extract, is known for its immunostimulant properties as well as its antioxidant and antimicrobial effects.<sup>11,12</sup>

## How to Use Urinary-Pro

• Take 2 tablets 2 times per day or as directed by a health care practitioner. Take a few hours before or after any medication or natural health product. Do not take with highly acidic foods (e.g., citrus fruits or juice) or medications, which may acidify urine. For occasional use only. Consult a health care practitioner for use beyond one week.

## **Cautions and Contraindications**

• Consult a health care practitioner if symptoms persist or worsen. Consult a health care practitioner prior to use if you have a liver disorder, fever, painful urination (dysuria), spasms, or blood in urine. Consult a health care practitioner prior to use if you have a progressive systemic disease such as tuberculosis, collagenosis, multiple sclerosis, AIDS and/or HIV infection, or an autoimmune disorder. Consult a health care practitioner prior to use if you are taking medications to suppress the immune system (immunosuppressive medications). Do not use this product if you are pregnant, breastfeeding, or have a kidney disorder. Stop use if hypersensitivity/allergy occurs. Keep out of reach of children.

#### PATIENT NAME:

#### PRACTITIONER NOTES:

No known drug interactions exist. Berberine has been shown to lower blood glucose levels and may have an additive effect when combined with other hypoglycemic medications, such as metformin.<sup>13</sup> Berberine has also been shown to increase levels of cyclosporin A. and combined use should be avoided.<sup>14</sup> Berberine has demonstrated inhibitory activity on cytochrome enzymes CYP2D6, CYP3A4, and CYP2C9, and use of medications metabolized by these enzymes should be monitored.<sup>15</sup> Echinacea has been shown to increase the duration of steroid-free periods among participants with steroiddependent uveitis, an inflammatory condition, and may improve the efficacy of antifungal treatments for infection with candida sp.<sup>16-18</sup> Although direct evidence of drug interactions with echinacea is lacking, it is a weak inhibitor of CYP1A2 and minor inducer of CYP3A4 and may have a slight effect on drugs metabolized through these pathways.19

## **Quick Tips for Optimal Health**

- A more plant-based diet may help reduce the risk of urinary tract infections. Among women following a vegetarian diet, the risk was approximately 20% lower than for women eating meat.<sup>20</sup>
- Although controlled data is limited, one randomized trial found that women with recurrent bladder infections who increased their fluid intake had significantly fewer infections than women who did not. The latter were encouraged to add 1.5 L to their usual intake.<sup>21</sup>
- Other preventative measures, including emptying your bladder after intercourse, wiping from front to back, and avoiding holding in urine, may all help reduce infections.<sup>22</sup>
- Antibiotics are frequently prescribed for urinary tract infections and may warrant a subsequent dose of probiotics to reduce their adverse effects.<sup>23</sup>
- Some evidence suggests that a lower vitamin D level increases the risk for urinary tract infections. Recurrent infections point to the benefit of knowing your vitamin D level and supplementing if it is low.<sup>24,25</sup>
- A recently conducted, large, systematic review found that cranberry products, especially cranberry juice, can significantly help reduce urinary tract infections among people most at risk.<sup>26</sup> Large amounts (at least 1 L per day) of cranberry juice should not be taken simultaneously with Urinary-Pro to avoid acidifying the urine.

#### PRACTITIONER CONTACT INFORMATION:

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